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I hereby certify that this correspondence is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: The Commissioner of Patents and Trademarks, Box Missing Parts, Washington, D.C. 20231.

Cindy Wilson 5/22/02  
Cindy Wilson

Patent

Attorney Docket P-011-RC2

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:	)	
	)	
Burton G. Christensen et al.	)	Group Art Unit: 1627
	)	
Application No.: 10/015,534	)	
	)	Examiner: Unassigned
Filed: December 13, 2001	)	
	)	
For: Methods for Identifying Novel	)	
Multimeric Agents that Modulate	)	
Receptors	)	

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents  
Washington, DC 20231

Dear Sir:

In accordance with the duty of disclosure as set forth in 37 CFR §1.56, Applicants hereby submit the following information in conformance with CFR §§1.97 and 1.98. Enclosed herewith is modified form PTO-1449 which lists documents for consideration by the Examiner.

Pursuant to 37 CFR §1.98, those patents or publications which are marked with an asterisk (\*) in the attached PTO-1449 form are not supplied because they were previously cited by or submitted to the Office in prior application U.S. Serial No. 09/493,462, filed January 28, 2000, and relied upon in this application for an earlier filing date under 35 USC §120. The

Examiner is respectfully requested to obtain copies of these documents from this parent application.



Pursuant to 37 CFR §1.98(a)(3)(i), a concise explanation of the relevance of the following non-English language documents is provided:

WO98/16536 - This non-English language document was cited in the search report for the corresponding Singapore application (now abandoned). This document relates to saccharide libraries and methods for producing and using such libraries.

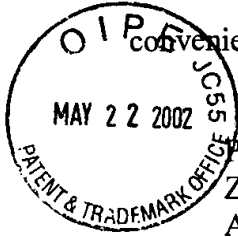
EP 0825191 - This non-English language document was cited in the corresponding Taiwanese application (now abandoned). This document relates to chromanyl-ascorbic acid derivatives. Corresponding U.S. Patent No. 5,962,701 has been cited as an English-language equivalent.

JP62-164609 - This non-English language document was cited in the corresponding Taiwanese application (now abandoned). This document relates to ascorbic acid derivatives. An English-language abstract has been provided.

The following documents were cited in the International Search Report for related PCT Application No. PCT/US99/12989. A copy of the International Search Report (labeled "IDS Exhibit A") is enclosed for the convenience of the Examiner.

Leboulluec et al., Bioorg. Med. Chem. Lett. 5(2):123-126 (1995);  
Kretzschmar et al., Tet. Lett. 51(47):13015-13030 (1995);  
Janssen, Drug Invest. 3(Suppl 1):1-2 (1991);  
Piergentili et al., Il Farmaco 49(2):83-87 (1994) ;  
Liang et al., Science 274:1520-1522 (1996);  
Gardiner, Exp. Opin. Invest. Drug 7(3):405-411 (1998);  
Maggio et al., PNAS 90:3103-3107(1993);  
Lee et al., Mol. Pharmacol. 50:140-148 (1996);  
Kahne, Curr. Opin. Chem. Biol. 1(1):130-135 (1997);  
Shuker et al., Science 274:1531-1534 (1996); and  
Goodman et al., US 4,587,046.

In addition, the Written Opinion for PCT Application No. PCT/US99/12989 cited the following documents. A copy of the Written Opinion ("IDS Exhibit B") is enclosed for the convenience of the Examiner.



Portoghese, J. Med. Chem. 35(11):1927-1937 (1992); and  
Zeng et al., J. Chrom. A 794:3-13 (1998);  
Agrafiotis et al., US 5,463,564; and  
Suh et al., Bioorg. Med. Chem. Lett. 7(4):389-392 (1997).

The Supplementary European Search Report for the corresponding European Application EP 99930185 cited the following documents. A copy of the Supplementary European Search Report ("IDS Exhibit C") is enclosed for the convenience of the Examiner.

Lilly/Fritz et al., WO97/00244  
Farmarc/Penkler et al., WO98/02186  
Glaxo/Tyers, EP 0433043

The Austrian Patent Office cited the following documents in the corresponding Singapore Application 9902843-3 (now abandoned). A copy of the Singapore Search Report ("IDS Exhibit D") is enclosed for the convenience of the Examiner.

Merck/Kim, GB 2317173  
D. Krebsforsch./Wiessler et al., WO98/16536  
Rockefeller U./Cowburn et al., WO98/16638

Lastly, the following documents were cited by the Taiwanese Patent Office in corresponding Taiwanese Patent Application 88109479 (now abandoned). A copy of the translation of the Decision of the Intellectual Property Office labeled as "IDS Exhibit E" is also enclosed for the convenience of the Examiner.

Bernard et al., US 5,607,921  
Kanebo/Kane, JP62-164609  
Senju/Yoshida et al., EP 0306904  
BASF/Badi, EP 0825191 (See English equivalent Rosenau et al., US 5,962,701)  
Nikko/Masato et al., Chem Abstract 11917g 113(2):354 (1990)

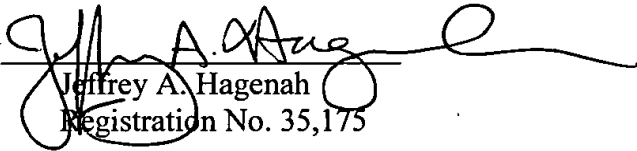
This Information Disclosure Statement is being submitted before the mailing of a first Office Action on the merits and therefore, no fee or certification is required under 37 CFR §1.97(b). In the event that an Office Action on the merits is mailed prior to receipt of this paper, the Commissioner is hereby authorized to charge the requisite fees under 37 CFR §1.97(c) for submission of this paper to Deposit Account No. 50-0344.

Consideration of the listed documents and an early action on the merits is respectfully requested. Additionally, the Examiner is requested to return an initialed copy of the enclosed form PTO-1449 to Applicants.

Respectfully submitted,

Date 5-22-02

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<b>FORM PTO-1449</b>		US DEPARTMENT OF COMMERCE		Attorney's Docket No.		Serial No.	
Approved for use through 10/31/2002		US Patent and Trademark Office		AMI-011-RC2		10/015,534	
<b>INFORMATION DISCLOSURE CITATION</b>				Applicant			
				Burton G. Christensen et al.			
(Use several sheets if necessary)				Filing Date		Group Art Unit	
				December 13, 2001		1627	

**U.S. PATENT DOCUMENTS**

Examiner Initial	Ref. No.	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	A1	*4,587,046		Goodman et al.			
	A2	*5,463,564		Agrafiotis et al.			
	A3	*5,607,921		Bernard et al.			
	A4	5,891,643		Fesik et al.			
	A5	*5,962,701		Rosenau et al.			

**FOREIGN PATENT DOCUMENTS**

Examiner Initial	Ref. No.	Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
	B1	*97/00244		WIPO				
	B2	*98/02186		WIPO				
	B3	98/16536		WIPO				
	B4	98/16638		WIPO				
	B5	*0306904		EPO				
	B6	*0433043		EPO				
	B7	0825191		EPO				
	B8	2317173		GB				
	B9	62-164609		JP				

(including English-language abstract)

**OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, etc.)

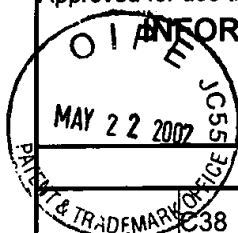
C1	*Adham et al., Naunyn-Schmiedeberg's Arch. Pharmacol. 348:556-575 (1993)
C2	*Adham et al., Neuropharmacol. 36(4/5):569-576 (1997)
C3	*Alabaster, Life Sci. 60(13/14):1053-1060 (1997)
C4	*Bartow et al., Drugs 55(2):303-322 (1998)
C5	*Beer et al., Br. J. Pharmacol. 110:1196-1200 (1993)
C6	*Bergendal et al., Br. J. Pharmacol. 117:1009-1015 (1996)
C7	*Bergsma et al., Biochem. Biophys. Res. Comm. 183:989-995 (1992)
C8	*Boulet, Drugs 47(2):207-222 (1994)

EXAMINER	DATE CONSIDERED
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EXAMINER: Initial if references considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered.  
 Include copy of this form with next communication to applicant.

<b>FORM PTO-1449</b> Approved for use through 10/31/2002 <b>INFORMATION DISCLOSURE CITATION</b> MAY 22 2002 (Use several sheets if necessary)		US DEPARTMENT OF COMMERCE US Patent and Trademark Office		Attorney's Docket No. <b>AMI-011-RC2</b>	Serial No. <b>10/015,534</b>
				Applicant <b>Burton G. Christensen et al.</b>	
				Filing Date <b>December 13, 2001</b>	Group Art Unit <b>1627</b>
<b>OTHER DOCUMENTS</b> (Including Author, Title, Date, Pertinent Pages, etc.)					
C9	*Buckley et al., Mol. Pharmacol. 35:469-476 (1989)				
C10	*Burnier et al., Exp. Opin. Invest. Drug 6(5):489-500 (1997)				
C11	*Carini et al., J. Med. Chem. 34(8):2525-2547 (1991)				
C12	*Carini et al., J. Med. Chem. 33(5):1330-1336 (1990)				
C13	*Casas et al., J. Drugs Future 22(5):481-491 (1997)				
C14	*Chiu et al., JPET 252(2):711-718 (1990)				
C15	*Cvejic et al., J. Biol. Chem. 272(43):26959-26964 (1997)				
C16	*Dixon et al., Nature 321:75-79 (1986)				
C17	*Duncia et al., J. Med. Chem. 33(5):1312-1329 (1990)				
C18	*Dzielak, Exp. Opin. Invest. Drugs 7(5):741-751 (1998)				
C19	*Eglen et al., DNP 10(8):462-469 (1997)				
C20	*Eglen et al., Pharmacol. Toxicol. 78:59-68 (1996)				
C21	*Ferro et al., Br. J. Clinical. Pharmacol. 40:245-251 (1995)				
C22	*Fiorelli et al., J. Steroid. Biochem. Mol. Biol. 59(2):233-240 (1996)				
C23	*Gardiner, Exp. Opin. Invest. Drug 7(3):405-411 (1998)				
C24	*Garssen et al., Br. J. Pharmacol. 109:53-60 (1993)				
C25	*George, J. Neurochem. 69(3):1278-1285 (1997)				
C26	*Goadsby et al., Headaches 34:394-399 (1994)				
C27	*Goadsby, "Animal models of migraine: which model, why and for what"? <i>Migraine and Headache Pathophysiology</i> , Chap. 14, Ed. L. Edvinsson, Martin Dunitz Ltd., London 1999				
C28	*Green et al., J. Biol. Chem. 271(39):24029-24035 (1996)				
C29	*Green et al., Mol. Pharmacol. 41:889-893 (1992)				
C30	*Green et al., J. Biol. Chem. 269(42):26215-26219 (1994)				
C31	*Hamel et al., Mol. Pharmacol. 44:242-246 (1993)				
C32	*Heavner, DDT 1(7):295-304 (1996)				
C33	*Hebert et al., J. Biol. Chem. 271(27):16384-16392 (1996)				
C34	*Hebert et al., Biochem. Cell Biol. 76(1):1-11 (1998)				
C35	*Holzgrabe et al., DDT 3(5):214-222 (1998)				
C36	*Janssen, Drug Invest. 3(Suppl 1):1-2 (1991)				
C37	*Kahne, Curr. Opin. Chem. Biol. 1(1):130-135 (1997)				
EXAMINER			DATE CONSIDERED		
EXAMINER: Initial if references considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.					

<b>FORM PTO-1449</b> Approved for use through 10/31/2002		US DEPARTMENT OF COMMERCE US Patent and Trademark Office		Attorney's Docket No. <b>AMI-011-RC2</b>	Serial No. <b>10/105534</b>
<b>INFORMATION DISCLOSURE CITATION</b> (Use several sheets if necessary)				Applicant <b>Burton G. Christensen et al.</b>	
				Filing Date <b>December 13, 2001</b>	
				Group Art Unit <b>1627</b>	
<b>OTHER DOCUMENTS</b> (Including Author, Title, Date, Pertinent Pages, etc.)					
C38	*Kobilka et al., Nature 329:75-79 (1987)				
C39	*Kretzschmar et al., Tet. Lett. 51(47):13015-13030 (1995)				
C40	*Kukkonen et al., J. Pharmacol. Exp. Ther. 279(2):593-601 (1996)				
C41	*Kukkonen et al., Biochem. Biophys. Res. Comm. 243(1):41-46 (1998)				
C42	*Leboulluec et al., Bioorg. Med. Chem. Lett. 5(2):123-126 (1995)				
C43	*Lee et al., Mol. Pharmacol. 50:140-148 (1996)				
C44	*Liang et al., Science 274:1520-1522 (1996)				
C45	*Liggett et al., Mol. Pharmacol. 36:641-646 (1989)				
C46	*Lofdahl et al., Asthma 2:1523-1533 (1997)				
C47	*Longmore et al., Br. J. Clin. Pharmacol. 42:431-441 (1996)				
C48	*McClellan et al., Drugs 55(5):713-718 (1998)				
C49	*McCrea et al., Br. J. Pharmacol. 110:619-626 (1993)				
C50	*MacLagan et al., TIPS (Suppl):88-92 (1989)				
C51	*Maggio et al., PNAS 90:3103-3107(1993)				
C52	*Martel et al., Drugs Future 22(2):135-137 (1997)				
C53	*Martin et al., Br. J. Pharmacol. 121:157-164 (1997)				
C54	*Merlos et al., Drugs Future 22(8):850-855 (1997)				
C55	*Monnot et al., J. Biol. Chem. 271(3):1507-1513 (1996)				
C56	*Mukoyama et al., J. Biol. Chem. 268(33):24539-24542 (1993)				
C57	*Nials et al., Br. J. Pharmacol. 110:1112-1116 (1993)				
C58	*Nials et al., Eur. J. Pharmacol. 251:127-135 (1994)				
C59	*Nikko/Masato et al., Chem Abstract 113(2):354 #11917g (1990)				
C60	*Nimchinsky et al., J. Biol. Chem. 272(46):29229-29237 (1997)				
C61	*Ngo et al., Drugs Future 22(3):260-269 (1997)				
C62	*Pauuwels et al., Biochem. Pharmacol. 45(2):375-383 (1993)				
C63	*Pauuwels et al., Naunyn-Schmiedeberg's Arch. Pharmacol. 353:144-156 (1996)				
C64	*Piergentili et al. II Farmaco 49(2):83-87 (1994)				
C65	*Portoghese, J. Med. Chem. 35(11):1927-1937 (1992)				
C66	*Rivero et al., Bioorg. Med. Chem. Lett. 3(4):557-560 (1993)				
C67	*Ruffolo et al., J. Med Chem. 38(19):3681-3716 (1995)				
EXAMINER			DATE CONSIDERED		
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<b>FORM PTO-1449</b> Approved for use through 10/31/2002 <b>INFORMATION DISCLOSURE CITATION</b> (Use several sheets if necessary)		US DEPARTMENT OF COMMERCE US Patent and Trademark Office		Attorney's Docket No. <b>AMI-011-RC2</b>	Serial No. <b>10/015,534</b>
				Applicant <b>Burton G. Christensen et al.</b>	
				Filing Date <b>December 13, 2001</b>	Group Art Unit <b>1627</b>
<b>OTHER DOCUMENTS</b> (Including Author, Title, Date, Pertinent Pages, etc.)					
C68	*Schoeffter et al., Naunyn-Schmiedeberg's Arch. Pharmacol. 340:135-138 (1989)				
C69	*Shuker et al., Science 274:1531-1534 (1996)				
C70	*Suh et al., Bioorg. Med. Chem. Lett. 7(4):389-392 (1997)				
C71	*Valentin et al., Br. J. Pharmacol. 119:35-42 (1996)				
C72	*Van de Water et al., Eur. J. Pharmacol. 299:127-137 (1996)				
C73	*Veldman et al., Mol. Pharmacol. 42:439-444 (1992)				
C74	*Waldeck et al., Eur. J. Pharmacol. 112(3):349-353 (1985)				
C75	*Waldeck et al., Acta Pharmacol. Toxicol. 58:209-218 (1986)				
C76	*Wexler et al., J. Med. Chem. 39(3):625-656 (1996)				
C77	*Wong et al., JPET 252(2):719-725 (1990)				
C78	*Wong et al., JPET 252(2):726-732 (1990)				
C79	*Wurch et al., Br. J. Pharmacol. 120:153-159 (1997)				
C80	*Yocca, Cephalagia 15(Suppl 14):174- (1995)				
C81	*Zakon, Trends Neurosci. 21:202-207 (1998)				
C82	*Zeng et al., J. Chrom. A 794:3-13 (1998)				
C83	*Zgombick et al., Naunyn-Schmiedeberg's Arch. Pharmacol. 54:226-236 (1996)				
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